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13. SUPPLEMENTARY NOTES

14. ABSTRACT

Spinal cord injuries now occur in nearly one quarter of the casualties from the conflicts in Afghanistan and Iraq. We know our military treatment facilities are seriously challenged by these casualties for several reasons including co-morbidities associated with blast injuries and the lengthy rehabilitation required. We also now know medical treatments that promise to return the fractured bodies to approximate pre-injury function. Yet, we lack basic knowledge of the long-term outcomes defined as personally and socially meaningful by survivors and families who are seeking to heal the fractured relationships with valued communities. This gap limits our ability to deliver on the promise given by advances in battlefield trauma care and rehabilitation which is to enable a return to full lives in the community (Messinger 2010; Luborsky 1993, 1994a).

Today's problem is that acute care treatments for the physical break are not matched by knowledge of how survivors continue life, conceptualize SCI and return to a full life. The US Surgeon General (DHHS 2004) faults the literatures' narrow incident-based focus on acute medical events and neglect of ongoing processes after events; this narrowness neglects how people return to a valued life with disability(Verbrugge& Jette 1994). Yet, consensus is emerging that long-term outcomes are the next frontier (IOM 2005, WHO 2001) requiring us to ask new questions and use methods suited to cultural meanings and roles (Lysack et al 2007; Messinger 2010). An ample literature documents negative outcomes from inadequately treating the social and personal afflictions after SCI and other mobility loss. Thus, the hard earned knowledge of physical skills for living with altered bodies remains unmatched by societal practices to equip people with a culturally meaningful sense of community needed to thrive. We argue the time is ripe to discover the ways people with SCI create a sense of connection to meaningful communities and cultural identities that is key to long-term success.

15. SUBJECT TERMS

Spinal Cord Injury, Community Integration, Qualitative Research

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Spinal cord injuries now occur in nearly one quarter of the casualties from the conflicts in Afghanistan and Iraq. We know our military treatment facilities are seriously challenged by these casualties for several reasons including co-morbidities associated with blast injuries and the lengthy rehabilitation required. We also now know medical treatments that promise to return the fractured bodies to approximate pre-injury function. Yet, we lack basic knowledge of the long-term outcomes defined as personally and socially meaningful by survivors and families who are seeking to heal the fractured relationships with valued communities. This gap limits our ability to deliver on the promise given by advances in battlefield trauma care and rehabilitation which is to enable a return to full lives in the community (Messinger 2010; Luborsky 1993, 1994a).

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KEYWORDS

Spinal Cord Injury, Community Integration, Qualitative Research

Key Research Accomplishments

Research activities since Oct. 2013. To this date our research accomplishments have included:

Hired and Trained Research Assistant Staff member at WSU

Training of team members in ethnographic methods of research and analysis

Updated literature reviews for relevant research findings and methods

Develop and refined interview guide 0 rganize the comm unity panel

Recruit participants (we have recruited 3)

Published project article in Disability and Rehabilitation

Preparing second manuscript.

Presented research results at one national meeting.

Initiate interviews. P Is at U M B C and W SU conducted regular meetings via phone and em ail

We were able to recruit 3 participants of which only two finished the protocol. This project was plagued by recruiting problems. There was no way to create partnerships with relevant institutions. Based on our conversations with the first science officer associated with this project, Patricia Henry, military SCI patients were treated in VAs. We were not able to collaborate with VAs because our funding was not sufficient to collaborate with VA scientists and we did not budget enough time for moving through the IRB systems.

In serving for two years on the review committee for the SCIRP program grants nearly all applicants are VA scientists and researchers or faculty with joint appointments. To my recollection (which may be incomplete) there have been few military health researchers submitting grants to this particular effort.

Impact

None on discipline

In terms of social impact the results thus far point to potential gaps in service delivery to service-members with spinal cord acquired in combat and non-combat not deployed circumstances.

Recruitment for this study has been challenging. We have initiated collaborative relationships with multiple chapters of the Paralyzed Veterans of America. In addition to this we have successfully approached the DAV about promoting our study. An announcement was placed in the DAV magazine which elicited over 20 potential participants. Unfortunately none of them met the criteria for inclusion. They were either not veterans of OIF or OEF, or they did not have an SCI. We have received word from PN (the magazine of PVA) that an announcement of our study will be placed in their December publication. We have also established a collaboration with the University of Pittsburgh in order to have our project disseminated through their database of OIF / OEF veterans with SCI.

Furthermore, and in line with our recruitment and sampling strategies, we have accessed the networks of our currently recruited participants in order to meet our sample requirements.

These efforts have not proven to be of that much assistance. We have expanded our inclusion criteria to include all veterans as well as civilians.

As I noted above – the best place to find the former SCI patients that we sought was in databases held by particular VAMCs. We were not able to establish collaborations with researchers in those facilities in part because of funding and time constraints.

We sought to mitigate this problem by collaborating with PVA offices in those communities but ran into the problem that patients treated in specific VAMCs might return to communities anywhere in the US, and that most post-911 veterans are not participating actively in brick and mortar VSO organizations.

We are ceasing research activities.

Products

The tasks associated with this project were to establish collaborative relationships with PVA organizations, to interview participants, and to present research findings to international conferences and to peer review journals.

We created links with PVA organizations in Texas, California, Delaware, Michigan and Virginia. We were able to leverage these relationships to disseminate recruiting materials. We were able to identify three participants who met the study criteria. Two were interviewed completely, one did not complete the protocol

Our main outcome goal was to publish results in a peer review journal. An article was published in Disability and Rehabilitation, which is a leading peer review publication.

The content of the article represents are main findings.

DISABILITY AND REHABILITATION

RESEARCH PAPER

Long-term community reintegration: concepts, outcomes and dilemmas in the case of a military service member with a spinal cord injury

Heather Ann Fritz1, Cathy Lysack2, Mark R. Luborsky1, and Seth D. Messinger3

Abstract

Purpose: Despite growing knowledge about medical and functional recovery in clinical settings, the long-term issue of community reintegration with a spinal cord injury (SCI) in the military context remains virtually unexamined. Thus, the U.S. Department of Defense created the SCI Qualitative Research Program to advance knowledge about service members' reintegration into civilian life. The purpose of this paper is to better characterize the long-term outcomes related to the community participation experienced and desired vis-a'-vis a case study of a military veteran who suffered a service-related traumatic SCI. Methods: An in-depth anthropological interview was used with Jake, a 28-year old marine with a service-related C5/C6 SCI. Data were analyzed using content analysis. Findings: Three significant themes were identified: opportunities for better engaging socially meaningful others may not be adequately included in so-called ''client-centered'' interventions; how management of the social self in inter- personal interactions and public spaces is critical to gaining broader societal acceptance; and how meaningful age normative relationships and activities are essential to establish lasting inclusive social connections. Conclusions: Jake's case challenges existing models of rehabilita- tion predominantly focused on physical capacity building. Study findings point to the need for rehabilitation to invest more resources in efforts to address the existential and social elements of long-term social reintegration.

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The second paper is another case study of a participant in our project. This participant was slated for deployment to the OEF theatre when he was injured in a motor vehicle accident. The accident was deemed to be the responsibility of the other driver and the participant received acute care in an east coast MTF and longer term rehabilitation in a west coast polytrauma center associated with a VAMC.

Findings: Considerable differences in care received by this participant in contrast to participant presented in Disability and Rehabilitation.

- Had to advocate much more robustly to be sent to treatment center of choice
- Limited involvement with VSOs such as Yellow Ribbon or Wounded Warrior Project and etc
- Limited to no offers of VSO benefit programs (Homes for our Troops)
- Reliance on military and VA pension and programs.

Presentation to University of Pittsburgh State of the Science.

Site: Uniformed Service University of the Health Sciences, Bethesda, MD

Date: Nov. 2014

Presentation on rehabilitation outcomes and community reintegration experiences of servicemembers and veterans with extremity amputation or spinal cord injury.

We did meet the goal of publishing off this study.

We did not meet the goal of recruiting our full sample.

Participants

Seth Messinger, Principal Investigator Associate Professor of Anthropology

Seth Messinger is responsible for recruiting participants from the community, conducting interviews, arranging for transcription and analysis of data and contributing to writing.

Mark Luborsky, Co-Principal Investigator Director of Aging and Health Disparities Research Institute of Gerontology Wayne State University

Mark Luborsky is responsible for training research assistants, recruiting participants from the community, conducting interviews, arranging for transcription and analysis of data and contributing to writing.

Cathy Lysack, Co-Investigator Deputy Director Institute of Gerontology Wayne State University

Cathy Lysack is responsible for recruiting participants from the community, conducting interviews, arranging for transcription and analysis of data and contributing to writing.

References

Cotner, B., Keleher, J., O'Connor, D., Trainor, J., Ottomanelli, L. 2014. Role of Social Networks for Veterans with Spinal Cord Injury in Obtaining Employment. Annals of Anthropological Practice. 37,2:40-56

Fritz, H., Lysack, C., Luborsky, M., Messinger, S. 2014. Long-Term Community Reintegration: Concepts, Outcomes, and Dilemmas in the Case of a Military Service Member with a Spinal Cord Injury. Disability and Rehabilitation, Early Online 1-7.

Lind, J., Powell-Cope, G., Chavez, M., Fraser, M., Harrow, J. 2014. Negotiating Domains of Patient Dignity in VA Spinal Cord Injury Units: Perspectives from Interdisciplinary Care Teams and Veterans. Annals of Anthropological Practice. 37,2:130-148

Institute of Medicine. (2007). The Future of Disability in America: Assessing the role of rehabilitation science and engineering. New York: Academy of Medicine Press.

Luborsky, M. 1993. The Romance With Personal Meaning In Gerontology: Cultural Aspects Of Life Themes. The Gerontologist, 33(4), 350-354.

Luborsky, M. 1994a. The Cultural Adversity of Physical Disability: Erosion of Full Adult Personhood. Journal of Aging Studies, 8(3), 239-253.

Lysack, C., Komanecky, M., Kabel, A., Cross, K., & Neufeld, S. (2007). Environmental factors and their role in community integration after spinal cord injury. Canadian Journal of Occupational Therapy, 74, 243-254.

Messinger, S 2010. Getting Past the Accident: Explosive Devices, Limb Loss, and Refashioning a Life in a Military Medical Center. Medical Anthropology Quarterly, 24(3), 281-303.

Verbrugge, L., & Jette, A. (1994). The disablement process. Social Science and Medicine, 38(1), 1-14. World Health Organization (WHO). (2001). International Classification of Functioning, Disability and Health – ICF. Geneva, Switzerland:

Disab and Rehab

Anth goes public SCI articles (2)